

UNITED STATES DEPARTMENT OF THE INTERIOR
BLM, BOISE DISTRICT
Morley Nelson Snake River Birds of Prey National Conservation Area
EA #DOI-BLM-ID-B011-2011-0011

Applicant (if any): BLM Action		Proposed Action: Bruneau Duck Ponds Wetland Burn		EA No. DOI-BLM-ID-B011-2011-0011-EA	
State: Idaho	County: Owyhee	District: Boise	Field Office: Four Rivers		Authority: NEPA, FLPMA
Prepared By: Four Rivers FO and District Fuels staffers		Title: Various			Report Date: 01/20/2012

LANDS INVOLVED

Allotment	Meridian	Township	Range	Sections	Acres
N/A	Boise	06S	06E	2,3&4	90

<u>Consideration of Critical Elements</u>	N/A or Not Present	Applicable or Present, No Impact	Discussed in EA
Air Quality			X
Areas of Critical Environmental Concern	X		
Cultural Resources			X
Environmental Justice (E.O. 12898)	X		
Farm Lands (prime or unique)	X		
Floodplains			X
Migratory Birds			X
Native American Religious Concerns			X
Invasive, Nonnative Species			X
Wastes, Hazardous or Solid	X		
Threatened or Endangered Species	X		
Social and Economic	X		
Water Quality (Drinking/Ground)	X		
Wetlands/Riparian Zones			X
Wild and Scenic Rivers (Eligible)	X		
Wilderness Study Areas	X		

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1.0 Introduction

Bruneau Duck Ponds (BDP) is a parcel of BLM administered lands which are managed by Idaho Department of Fish and Game (IDFG). BDP is one part of the greater C.J. Strike Wildlife Habitat Management Area which was authorized under Public Land Law 4123 (1967). The subject area consists of three constructed ponds ranging in size from 5-acres to 60-acres of open water, 120-acres of associated emergent wetland plant communities, and about 820-acres of upland vegetation types.

1.1 Need for and Purpose of Action

At present, wetland plant communities at BDP are in a decadent condition as a result of several decades without fire. Periodic fire is an essential natural disturbance which maintains the viability, bio-diversity, and productivity of native wetlands over the long term. Many areas which once supported vigorous emergent wetland plant communities have become dense decaying accumulations of biomass where little light can penetrate to support plant growth. These areas are very susceptible to invasion by rhizomatous noxious weed species.

Approximately 15-acres of wetland at BDP are moderately to heavily infested with noxious weeds, which occur in many discrete patches dispersed throughout the wetland. Weed species present include perennial pepperweed, Canada thistle, whitetop, purple loosestrife, and tamarisk. The State of Idaho's Noxious Weed Law (Title 22, Chapter 24, Idaho Code) requires that landowners eradicate noxious weeds on their land and prevent above-ground growth for at least two years. Areas with established noxious weeds have little value for wildlife habitat, and essentially become biological wastelands.

The objectives for treatments in the BDP would be to:

- Remove 80-90% of dead plant material to improve growing conditions for desirable native plant species, improve wildlife habitat, and prepare areas for herbicide treatment.
- Suppress noxious weeds to conform with Idaho's Noxious Weed Law over a 30-year period,

Summary of Proposed Action

- Burn approximately 90-acres of wetland vegetation in 4-5 separate polygons, one each to be burned per year beginning in spring 2012, and thereafter as necessary (approx. five to ten year intervals) to suppress noxious weeds and maintain wetland health. A prescribed fire plan would be prepared.
- Treat noxious weeds, as necessary, with approved herbicides and/or bio-control following the burn(s).

1.2 Location and Setting

The BDP are located 6 miles north of Bruneau, Idaho east of HWY 51, on the south side of the Snake River. From Mountain Home, Idaho, travel 15-miles south on State Hwy 51 to State Hwy 78. Turn east on Hwy 78, then travel 1/4-mile and turn north at the signed sportsman access road. The legal description is as follows: Township 06 South, Range 06 East, Sections 2, 3, 4, and 5.

1.3 Conformance with Applicable Land Use Plan

The proposed action would be in conformance with the (Morley Nelson) Snake River Birds Of Prey National Conservation Area Resource Management Plan (USDI-BLM, September 2008)

1.4 Relationship to Statutes, Regulations, and Other Requirements

- BLM Special Status Species Management Manual, 6840
- The Federal Clean Water Act (1977, as amended)
- National Environmental Policy Act of 1969 (NEPA).
- The proposed action is in conformance with the Final Programmatic Environmental Impact Statement Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in the 17 Western States (USDI 2007a) and the Noxious and Invasive Weed Treatment for the Boise District and Jarbidge Field Office (USDI 2007b).
- Federal Land Policy and Management Act of 1976 (FLPMA)
- Public Land Order 4153 (1967)
- According to BLM procedures, a prescribed fire Burn Plan will be prepared

Cultural Resource Laws and Executive Orders

BLM is required to consult with Native American tribes to “help assure (1) that federally recognized tribal governments and Native American individuals, whose traditional uses of public land might be affected by a proposed action, will have sufficient opportunity to contribute to the decision, and (2) that the decision maker will give tribal concerns proper consideration” (U.S. Department of the Interior, BLM Manual Handbook H-8120-1). Tribal coordination and consultation responsibilities are implemented under laws and executive orders that are specific to cultural resources which are referred to as “cultural resource authorities,” and under regulations that are not specific which are termed “general authorities.” Cultural resource authorities include: the National Historic Preservation Act of 1966, as amended (NHPA); the Archaeological Resources Protection Act of 1979 (ARPA); and the Native American Graves Protection and Repatriation Act of 1990, as amended (NAGPRA). General authorities include: the American Indian Religious Freedom Act of 1979 (AIRFA); the National Environmental Policy Act of 1969 (NEPA); the Federal Land Policy and Management Act of 1976 (FLPMA); and Executive Order 13007-Indian Sacred Sites. The proposed action is in compliance with the aforementioned authorities.

Southwest Idaho is the homeland of two culturally and linguistically related tribes: the Northern Shoshone and the Northern Paiute. In the latter half of the 19th century, a reservation was established at Duck Valley on the Nevada/Idaho border west of the Bruneau River. The Shoshone-Paiute Tribes residing on the Duck Valley Reservation today actively practice their culture and retain aboriginal rights and/or interests in this area. The Shoshone-Paiute Tribes assert aboriginal rights to their traditional homelands as their treaties with the United States, the Boise Valley Treaty of 1864 and the Bruneau Valley Treaty of 1866, which would have extinguished aboriginal title to the lands now federally administered, were never ratified.

Other tribes that have ties to southwest Idaho include the Bannock Tribe and the Nez Perce Tribe. Southeast Idaho is the homeland of the Northern Shoshone Tribe and the Bannock Tribe. In 1867 a reservation was established at Fort Hall in southeastern Idaho. The Fort Bridger Treaty of 1868 applies to BLM’s relationship with the Shoshone-Bannock Tribes. The northern

part of the BLM's Boise District was also inhabited by the Nez Perce Tribe. The Nez Perce signed treaties in 1855, 1863 and 1868. BLM considers off-reservation treaty-reserved fishing, hunting, gathering, and similar rights of access and resource use on the public lands it administers for all tribes that may be affected by a proposed action.

1.5 Scoping and Development of Issues

- The Bruneau Ducks Ponds area has no associated livestock grazing authorizations or permits; therefore, grazing use was not analyzed in this assessment.
- The area has no hunting seasons open during the proposed burn period (February 1 to April 1). The area is closed to all public entry from February 1 to July 31. No other recreational uses are known to occur at BDP during the burn period. Therefore, recreational use was not analyzed.
- The Idaho Department of Fish & Game has primary management responsibility at BDP, and contributed to the development of the proposed action.

2.0 Description of Proposed Action and Alternatives

2.1 Alternative 1 – No Action/Continue Current Management

BLM would not initiate active control measures for noxious weeds in the BDP.

2.2 Alternative 2 – Proposed Action

Over a 30-year period, proximately 90-acres of emergent wetland vegetation at BDP would be burned to prepare areas for herbicide treatment to suppress noxious weeds and improve wildlife habitat. Four to five separate burn polygons would be delineated. Only one polygon would be burned each year, beginning with burn 1 (approx. 14-acres) in 2012, followed in the second year by burn 2 (approx. 48-acres) in 2013. Thereafter, separate polygons would be re-burned in a 7-10 year cycle, with only one polygon burned each year.

Fire perimeters around the remaining wetlands have not been delineated at this time. However, all burns would occur on BLM administered lands and would be limited to those areas within the boundary of the wetland vegetation perimeter illustrated in Map 1. Upon selection of the remaining polygons, additional inventories for cultural resources, special status plants, and special status wildlife would be conducted before establishing fuel breaks. If additional inventories and surveys reveal no resource issues preclude the proposed action, a separate *Determination of NEPA Adequacy* (DNA) document would be prepared prior to burning.

As required by BLM policy, a *Fire Plan* would be developed and approved by the Authorized Officer prior to initiating the proposed burn. The plan identifies methods for securing and confining the burn to the treatment areas, public safety issues, infrastructure protection, weather limitations, and smoke management practices. For example, a 24-foot-wide fuel break (map 3), would be mowed around each fire perimeter using a tractor mounted rotary mower, then fuel breaks would be black-lined before the scheduled to further secure the fire boundary (map 3) and protect nearby cultural resources. Fire suppression equipment on site during all fire activities would include at a minimum: one BLM heavy dozer, four heavy fire engines, and supporting firefighters.

Weather patterns and local weather conditions would be carefully monitored by the Burn Boss before fires are ignited. Fires would not be ignited under temperature inversion conditions, or when local weather conditions could result in a violation of State air quality standards. The BLM Boise District is an active participant with the Idaho/Montana Airshed Group. Prior to the fall or spring burning season, all prescribed burning activities are entered into the Air Shed Management System database. Information entered into the database includes acreage, type of burn, elevations, airshed, fuel load and location. The day before the burn, a smoke permit request would be submitted by the Burn Boss or the Boise Interagency Logistics Center (BILC) before 12:00 PM MST, prior to implementation of the burn. Prescribed burns are then approved or disapproved by the Smoke Management Unit, depending on air quality and environmental conditions, type of burning (piles, landscape burn, broadcast burn, etc.), fuel loading, elevation and proximity to impact zones. Approval for burning would be given the day prior to the burn by the Smoke Unit at Missoula, Montana.

Weed Treatments

Following the burns, areas infested with noxious weeds would be treated with Environmental Protection Agency (EPA) approved herbicide(s) in mid to late spring when targeted noxious weeds are actively growing. As in the past, IDF&G would continue as the primary applicator of herbicides treatments at BDP. A second herbicide application in the fall may be necessary to treat re-growth, particularly in the first and second years following the burn(s). Herbicides would be applied with backpack sprayers or from UTVs. Tamarisk would be cut and remaining stumps treated with approved herbicide(s). Depending on the target weed species, herbicides proposed for use would include metsulfuron methyl, chlorsulfuron and 2-4-D amine for herbaceous species, and triclopyr ester for woody species. Herbicide application would occur annually on an as-needed basis throughout the 30-year life of this plan.

Biological control would be utilized to treat species where effective biological control agents are available. This method of weed control is supported by the Federal Noxious Weed Act of 1974 (7 U.S.C. 2801-2813), as amended by Sec. 15, which states that the establishment of an integrated weed management system to control undesirable plant species is an acceptable treatment option. This is also identified as an option under Idaho's Noxious Weed Law.

Effective biological control agents are available for Canada thistle, purple loosestrife, and tamarisk. For Canada thistle, two agents have been approved which have been effective in similar ecotypes: 1) *Hadroplontus* (= *Ceutorhynchus*) *litura*, a stem-mining weevil, and *Urophora cardui*, a gall-forming fly. For purple loosestrife, four agents are available but impacts are mainly attributed to two leaf-feeding beetles: 1) *Galerucella californiensis* and *Galerucella pusilla*. Tamarisk, or saltcedar, biocontrol has proven effective, but is no longer permitted for interstate movement. The leaf-feeding beetle *Diorhabda carinulata* is present in Oregon and is expected to naturally migrate to Idaho along the Snake River in the near future.

3.0 Affected Environment and Environmental Consequences

3.1 Vegetation – Uplands, Riparian Areas and Wetlands

3.1.1 Affected Environment - Vegetation – Uplands, Wetlands, and Noxious Weeds

Uplands

The approximately 820-acre upland plant community type at BDP is composed of a greasewood/fourwing saltbush dominant overstory with a western wheatgrass/bottlebrush squirrel tail understory. Invasive cheatgrass and medusahead rye is also present in the understory. In general, the uplands are in good condition, and have not been grazed for at least 30-years.

Wetlands

The native emergent wetland vegetation habitat type at BDP is hardstem bullrush and cattail. Native woody vegetation includes Pacific and coyote willows. Invasive non-native woody species include Russian olive and tamarisk. Plant inventories conducted by the Four Rivers Field Office botanist show there are no known threatened, endangered, or BLM special status riparian or upland plant species present at BDP. At present, most of the BDP wetland are in a decadent condition as a result of several decades without fire. Some areas which once supported vigorous emergent wetland plant communities are presently reduced to dense decaying accumulations of biomass where little light can penetrate to support plant growth. These areas are very susceptible to invasion by rhizomatous noxious weed species such as Canada thistle and perennial pepperweed.

Noxious Weeds

Noxious weeds occur in numerous discrete patches throughout the wetlands. Weed species include perennial pepperweed, Canada thistle, purple loosestrife, and tamarisk. These aggressive rhizomatous weeds severely damage the natural biological functioning condition of riparian areas and wetlands. This is particularly a problem where perennial pepperweed and Canada thistle infestations exist. Riparian and wetland functioning condition is “functional-at-risk with downward trend” (TR 1737-16, 1999) on an estimated 15-acres of wetland areas at BDP as a result of noxious weed invasion. The remaining acreage is currently in proper functioning condition. Previous efforts to suppress noxious weeds at BDP have been carried-out exclusively by IDF&G (since 1967). Both mowing and herbicide applications have been used in this effort as per the Noxious and Invasive Weed Treatment EA from 2005 (ID-100-2005-265).

BLM weed specialists and IDFG released golden loosestrife beetles at BDP in 2003. These bio-control agents have been remarkably successful at suppressing purple loosestrife in the emergent wetland areas at BDP and along the adjacent Snake River corridor.

3.1.2 Environmental Consequences – Vegetation – Uplands, Wetlands, and Noxious Weeds

3.1.2.1 Alternative A - No Action

Uplands

Upland vegetation would remain unchanged.

Wetlands

Noxious weeds would continue to increase and eventually become the dominant vegetation in much larger portions of the BDP each year. In addition, BLM would not be in compliance with Idaho State weed laws. The weed problem would continue for the foreseeable future. Large areas of dead and decadent emergent wetland vegetation would continue to have low productivity and be susceptible to noxious weed invasion. IDF&G would continue to apply herbicides on an annual basis..

3.1.2.2 Alternative B - Proposed Action

Uplands

Upland vegetation would remain unchanged as the proposed burn area is in wetland vegetation only.

Wetlands

Short and long term effects to native wetland vegetation would be positive. It is expected the proposed action would achieve the same level of success as was experienced with similar burn and spray treatments applied to other wetland areas in the Boise District, including the nearby Ted Trueblood Wildlife Habitat Management Area and Bull Pasture wetlands near Grand View, Idaho, and the Little Willow Wetland east of Payette, Idaho. At Trueblood, Bull Pasture, and Little Willow wetlands, vegetation responded favorably following removal of the dead thatched overstory, and exceeded 8-10 feet in height at the end of the first summer following treatment. In addition, re-sprouting and growth of vegetation typically occurs several weeks earlier in burned vs. unburned areas as soils are exposed to solar heating, light is increased for plant growth, and essential plant nutrients formerly sequestered in dead plant material are made available.

Noxious Weeds

In spite of burning and herbicide treatments, noxious weeds would persist in the plant community at BDP over the short through long terms. However, the proposed action would substantially reduce weed densities to levels that would not damage the overall biological functioning of the wetland over the short and long term. Cattail and bulrush are highly competitive species and their release following prescribed fire would aid in stopping or suppressing expansion of noxious weeds to other areas. Burning removes the thatched overstory of dead vegetation which fully exposes sprouting weeds to herbicide application. This results in increased chemical efficiency and reduced application volumes as chemicals are not intercepted by dead plant materials. When applied according to label directions, the preferred chemicals do not adversely affect cattails, bulrush, sedges, grasses, or rushes. Further, the proposed action would assure BLM is in compliance with Idaho State weed laws.

In addition to chemical weed treatments, bio-control agents may be introduced at the BDPs following the burns. Biological control is a long-term control measure which suppresses target weeds to population levels below ecological damaging thresholds. Some biological control agents are active in the short-term and persist while others take many years (sometimes decades) for their effects to be visible. With some of the new biological control agents, there is limited documented field data in many cases. Lab and common garden experiments for the new agents

reveal potential impacts and determine whether or not a biological control agent is permitted for release, but the ultimate scale and timeline of the agent's overall impact is examined on a site-by-site basis.

The 2007 Vegetation Management EIS (USDI 2007a) analyzed the impacts of herbicides, and specifically analyzed the use of the selected chemicals on public lands regarding human health hazards, human exposure, human risk, non-target species hazard, non-target species exposure, and non-target species risk. The findings show the herbicides proposed for use have no adverse impacts on the quality of the human environment or on non-target plant and animal species. Both chemicals have very low toxicity ratings (DuPont, MSDS 2004). Herbicide applications using either of these products have shown effective long term suppression of perennial pepperweed, Canada thistle, Scotch thistle, knapweed, poison hemlock, and whitetop.

3.2 Wildlife

3.2.1 Affected Environment – Wildlife

Following passage of Public Land Law 4123 (1967), BDP have been exclusively managed by IDFG for the benefit of waterfowl, upland game birds, wading birds, and migratory land birds, together with a host of other game and non-game wildlife. BDP are a part of the greater C. J. Strike Wildlife Management Area.

Resident populations of ring-necked pheasant and valley quail occur in and adjacent to the wetlands. In addition, IDFG routinely stocks game-farm pheasants and quail during the upland game bird season. Several species of raptors including red-tailed hawk, great horned owl, bald eagle, marsh hawk, and others forage at BDP. Also, many fur-bearing mammals are present, including: muskrat, mink, striped skunk, raccoon, red fox, cottontail rabbit, and coyote. Amphibians include bull frog, chorus frogs, western toad, and long-toed salamanders. Leopard frogs are also present. However, they are commonly displaced by bull frogs. Reptiles may include western rattlesnake, gopher snake and western terrestrial garter snake. There is no known special status, threatened, or endangered animal species present in the project area.

Wildlife habitat quality has been degraded by weed invasion and decadent unproductive wetland vegetation. Stands of noxious weeds alter habitat and create conditions unsuitable for wildlife. Noxious weeds reduce available nesting habitat and displace suitable forage. Dense stands of noxious weeds are likely avoided by wildlife, or are only used on a minimal basis.

3.2.2 Environmental Consequences – Wildlife

3.2.2.1 Alternative A- No Action

Wildlife habitat would continue to deteriorate as wetland vegetation vigor and productivity is reduced by the smothering build-up of dead biomass collecting each year at BDP. These areas would continue to have low potential to support wildlife, and would be susceptible to weed invasion over the short through long terms. Systematic replacement of the dominant native plant community by noxious weeds would reduce wildlife population numbers and diversity in the project area over the long term.

3.2.2.2 Alternative B- Proposed Action

Fire has been a natural part of ecosystems for millennia, and wildlife species have adapted to habitat changes created by fire (Smith 2000). The proposed action would occur when the intensity and severity of fire would be minimized, reducing the impacts to both wildlife and habitat. Wildland and prescribed fires kill and injure a relatively small proportion of animal populations and species (Smith 2000).

The proposed action would be implemented in late winter or early spring to avoid disturbance of birds during the nesting season. Loss of nestlings and fledglings is the most common form of mortality to birds from fire (Smith 2000). Burning would be initiated as soon as fuel moistures would allow for a clean burn to occur. Prescribed burning would have minimal adverse impacts to migratory land birds, upland game birds and most waterfowl due to the time of year burning would occur. Some species such as Canada goose can begin nesting early in the year and some nests may be impacted by the proposed action. There would be short-term loss of habitat for some species after vegetation structure, hiding, and escape cover is altered or consumed by the proposed burning.

While habitat structure would rapidly reestablish in burned areas, some species may find the treated area unsuitable for nesting habitat in the first year post-treatment. However, after the first year and for many years following, bird habitat, including foraging habitat for raptors, would be improved over current conditions. A total of 120- acres would be burned in four to five separate polygons. Since only one polygon each year would be treated, and many acres around the treatment polygons would remain un-treated, there would be habitat available for wildlife and birds over the short-term while the treated polygon recovers.

The ability of mammals to survive fire depends on their mobility and on the uniformity, severity, size, ground speed, and duration of the fire (Wright and Bailey 1982). The proposed burning would be of low severity, of short duration, and would cover a small area. While there could be some limited mortality, the prescribed burning would most likely impact mammals through disturbance and loss of hiding and thermal cover, and this would lead to temporary alteration of habitat use and displacement within their respective home ranges.

The proposed action is within a wetland habitat type that likely supports a diverse community of amphibians and reptiles. Even with their limited mobility, there are few reports of fire-caused injury or mortality to reptiles and amphibians (Russell et al. 1999). The timing of the proposed burning would be when most, if not all, resident herpetofauna would still be inactive, reducing the likelihood of mortality. Habitat may be reduced in the short-term (3 to 6 months) but long-term benefits would be expected as the wetland recovers.

3.3 Water Quality

3.3.1 Affected Environment – Water Quality

Water supplying BDP is pumped directly from Snake River for about 6-months each year. This water does not return back to Snake River via a discrete flow path, and evaporates, transpires via vegetation, or returns back to the river via subsurface flows. It is probable that water quality is improved when it passes into the wetland as hydrophytic vegetation like cattails and bulrush are

very efficient at sequestering phosphorus, nitrogen, potassium, and other micro and macronutrients. In addition, wetlands collect and store relatively high levels of atmospheric carbon dioxide, a so-called “greenhouse gas.”

3.3.2 Environmental Consequences – Water Quality

3.3.2.1 Alternative A - No Action

The wetland would continue to have a positive effect on water quality in the Snake River watershed over the short through long terms.

3.3.2.2 Alternative B - Proposed Action

The wetland would continue to have a positive effect on water quality in Snake River over the short through long terms. Release of wetland vegetation following the proposed burn would increase plant vigor and density, resulting in more efficient uptake of free nutrients, and would also increase annual carbon sequestration. Water contamination resulting from spray treatments is not expected to occur as herbicides would be applied according to label directions, and would not be applied in areas with free-flowing or standing water. Further, the selected herbicides have low toxicity, and are relatively immobile in soil when applied according to label directions. Water quality in nearby Snake River, or standing water in the BDP, would not be jeopardized by the proposed action over the short through long terms.

3.4 Air Quality

3.4.1 Affected Environment – Air Quality

Air quality in a given area is described by the concentration of various pollutants in the atmosphere. National Ambient Air Quality Standards (NAAQS) are established by the US Environmental Protection Agency (EPA) for criteria pollutants. These standards are generally expected to be met under the existing conditions in the area. Air quality in the project area is considered good. Areas which could be impacted by smoke released from the prescribed burns include the local C. J. Strike airshed.

3.4.2 Environmental Consequences – Air Quality

3.4.2.1 Alternative A - No Action

There would be no direct or indirect effects to air quality, since no air emissions would occur from the No Action alternative.

3.4.2.2 Alternative B - Proposed Action

The proposed prescribed burns would produce a direct, short-term negative effect on local air quality. Prescribed fire is a direct source of particulate matter (both PM10 and PM2.5), nitrogen oxide, and carbon monoxide to the airshed. However, the area to be burned is relatively small in size, and treatments would be of short duration. It is not expected that air quality would be significantly jeopardized in the local airshed as the burn would occur only when weather patterns would disperse the smoke. Other considerations for local air quality would be described in the Bruneau Duck Ponds *Burn Plan*. The Boise BLM Fuels program will model the Bruneau Duck Ponds Burn Plan off of the Ted Trueblood Burn Plan (located 20-miles west) which has the same

fuel types. Prior to ignition the Burn Boss will confirm approval for air quality by submitting request to burn through the Montana/Idaho Airshed Group which regulates burning in Idaho as it pertains to Air Quality. The Burn Boss will also obtain local forecast for burn to determine weather conditions that will be adequate to disperse smoke.

3.5 Cultural Resources

3.5.1 Affected Environment – Cultural Resources

BLM is required to consult with Native American tribes to “help assure (1) that federally recognized tribal governments and Native American individuals whose traditional uses of public land might be affected by a proposed BLM action, will have sufficient opportunity to contribute to the decision, and (2) that the decision maker will give tribal concerns proper consideration” (USDI 2004). Tribal coordination and consultation responsibilities are implemented under laws and executive orders that are specific to cultural resources which are referred to as “cultural resource authorities” (EA 1.5). The proposed action is in compliance with the aforementioned authorities.

The entire project area was previously surveyed for cultural resources in response to relicensing of the C. J. Strike hydroelectric facility in 1997. Numerous prehistoric sites and some historic sites were recorded within the proposed project area as well as in the vicinity of the proposed project area. In 2006 the Idaho Power Company (IPC) completed the C. J. Strike Historic Properties Management Plan which was designed to provide protection of, mitigation of adverse impacts to, and enhancement of significant cultural resources during the term of the C. J. Strike Project license (IPC March 2006 p. 8).

The project area is at the western edge of the Northern Shoshone and Bannock and Northern Paiute Tribal territories. Due to the project’s proximity to the Snake River, and based on archeological evidence from the general southern Idaho area (IPC, March 2006 p.17), the area has seen relatively heavy use by Native American people who may have begun utilizing the resources as early as 16,000 years ago. Although few temporally diagnostic artifacts were recorded during the 1997 archeological surveys, based on what has been identified, use of the project area dates back at least 5000 years before present. The predominate site types are mainly tool manufacture or maintenance areas and short term hunting camps from mobile hunters.

Ethnographically the people who inhabited the area around the Snake River were referred to as the Salmon Eaters or *Agaiduka* (Steward 1938 p. 165). The people inhabiting the area south of the Snake River between the Owyhee River and the Bruneau River were also referred to as the Bruneau River band. These people moved seasonally between the Snake River for fish and other areas for plant resources. Ethnographic investigations were completed by L. D. Myers in 1996 to identify traditional cultural properties in the C. J. Strike area. Myers concluded that although the project area did at one time include areas of traditional and/or sacred importance, none of the interviewees or consultants could define any specific locations (IPC March 2006 p. 38). Surveys found no physical evidence of traditional cultural properties (TCPs), but this area may have significant traditional value to the Shoshone-Paiute Tribe. Without further information, the BLM cannot evaluate the significance of current or historical tribal uses of this area.

Although historic use of the area appears to be limited, based on the number of historic sites recorded during the 1997 surveys, the area was traversed by fur trappers between 1811 and the 1830s. Some of the routes became segments of the Oregon Trail. In 1842 an alternate route of the Oregon Trail south of the Snake River was opened. Called the South Alternate Oregon Trail, approximately 1 mile of this trail passes through the project area. The Oregon Trail and its associated alternate routes are part of the national register eligible National Trail System.

A total of three National Register eligible cultural resource sites are within the proposed project area. These include sites related to Native American use of the area and segments of the South Alternate Oregon Trail.

3.5.2 Environmental Consequences –Cultural Resources

3.5.2.1 Alternative A - No Action

There would be no direct or indirect effects to cultural resources, since no disturbance would occur from the No Action alternative.

3.5.2.2 Alternative B - Proposed Action

Cultural resource sites noted above will not be adversely impacted by the proposed burning or herbicide applications since there would be no ground disturbing activities allowed within the project area boundary (Map 2) under this alternative. The sites are located either wholly or partially within the proposed burn units. Where necessary, mitigation measures have been developed to avoid ground disturbing impacts, which can destroy spatial and vertical integrity of sites as well as break artifacts. Vehicular traffic will be confined to existing roads and culturally cleared mow lines, no other ground disturbing activities will take place within the sites. Burning vegetation within these sites will have no adverse effect as there are no combustible cultural artifacts present on any site. Vegetation that may be burned will not burn hot enough to kill the roots therefore any plants that burn will quickly sprout once the ground receives some moisture. There will be no short or long term adverse effects to the sites from the proposed project since the project has been designed to minimize ground disturbing activities and fire, under prescribed conditions, burns with less intensity and duration than a wildfire, thus producing less adverse effects. Under these conditions the fire will not affect stone tool materials or the Oregon Trail roadbed.

3.6 Cumulative Impacts

3.6.1 Scope of Analysis

The temporal scope of this analysis is limited to the period when smoke is issuing from the prescribed burns, and would continue until smoke is dispersed from the project area. Cumulative Actions within the spatial cope of the analysis would be limited to the affected airshed.

3.6.2 Cumulative Impacts – Air Quality

3.6.2.1 Alternative B - Proposed Action

Smoke generated from the proposed action could negatively affect short-term air quality in the local airshed. The *Fire Plan* requires that specific weather parameters be met prior to ignition to assure air quality standards are not violated. Range fires occur frequently in the greater airshed in the western Snake River Plain, and probably constitute the primary volume of airborne particulate matter introduced to the airshed in any one year. The proposed burn could occur any time in January through late February. Wildfires do not occur in the surrounding area until mid-June through late October, with the greatest frequency occurring in August. Because the proposed burn would be initiated months before wildfires are expected to occur, there would be no overlap which would cumulatively increase levels of particulate matter in the airshed.

Other possible sources of particulate matter and smoke in the airshed include sources of wind erosion (e.g., plowed fields, gravel roads), vehicle traffic on unpaved roads, and natural and prescribed agricultural fires. Because the proposed burns would occur when soil moisture levels are high in the surrounding area, the potential for increased levels of particulate matter from wind erosion would be negligible. The analysis area is in a rural location with a low road density; therefore, particulate matter input from vehicle travel would be expected to be non-existent or short term and localized. Overall, the proposed burns would have negligible cumulative impacts to air quality in the local airshed.

4.0 Consultation and Coordination

The IDF&G habitat biologist for C. J. Strike Wildlife Management Area was an active and critical participant in the planning phase for this project. The Shoshone–Paiute Tribe was consulted through the Wings and Roots process on December 6, 2011. Boise District weed specialists, and fuels management specialists surveyed the area. Four Rivers Field Office resources specialists conducted inventories for wildlife, botany, cultural, and wetland/aquatic resources. Idaho Power Corporation owns the adjacent private property; their archaeologists and wildlife habitat biologists have toured the area and provided constructive oral and written comments.

4.1 List of Preparers

J. Allen Tarter, Natural Resource Specialist (project lead)
Mike McGee, Wildlife Habitat Biologist
Karen Kumiega, Cultural Resources
Joey Milan, District Weed Specialist

4.2 List of Agencies, Organizations, and Individuals Consulted

Idaho Power Company
Shoshone-Paiute Nation at Duck Valley
Idaho Department of Fish and Game

4.3 Public Participation

Due to the non-confrontation nature of the proposed action, no public meetings were scheduled. A copy of this EA would be mailed to agencies and interested publics of record, and would also

be posted on the BLM webpage (https://www.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do).

5.0 Literature Cited

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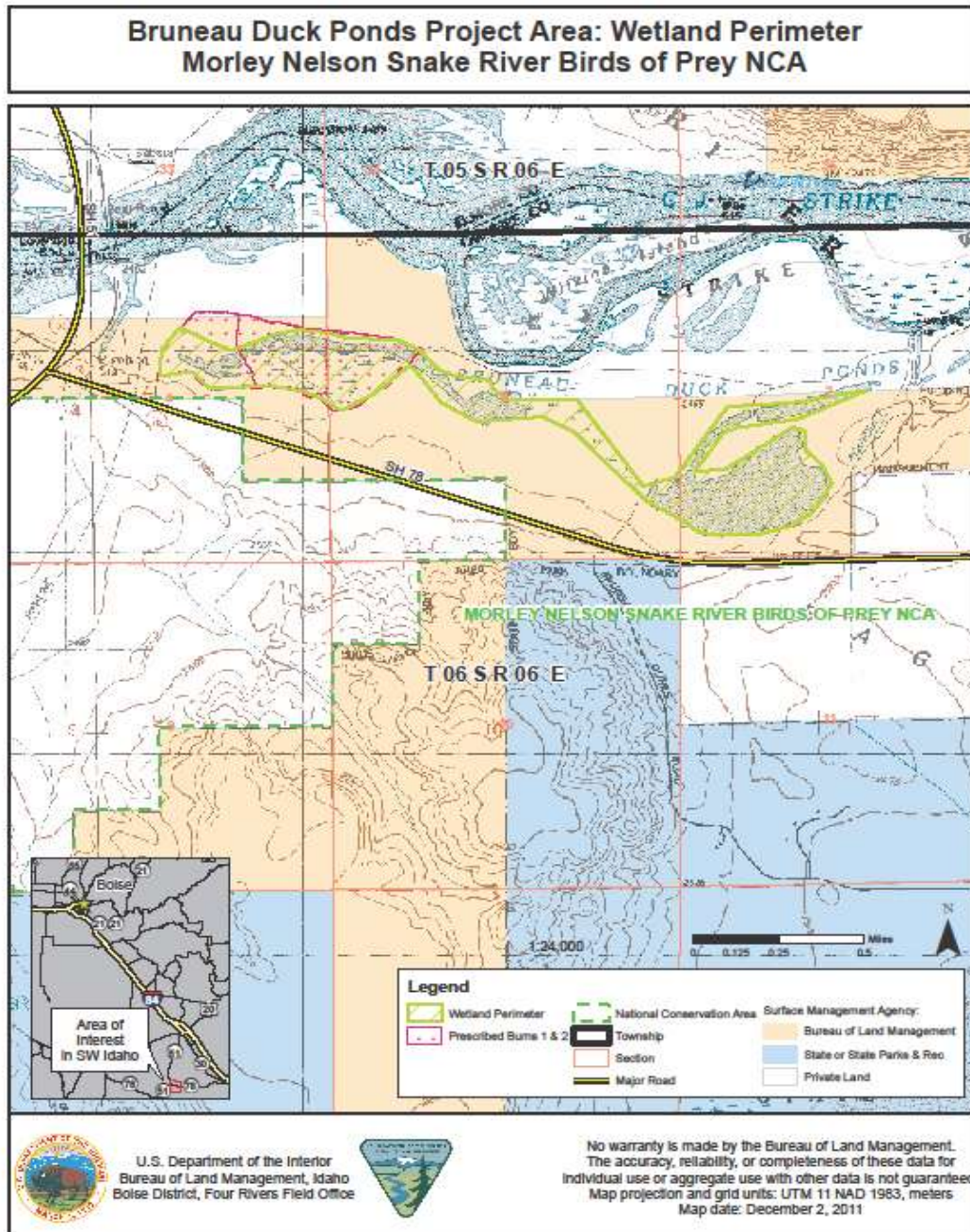
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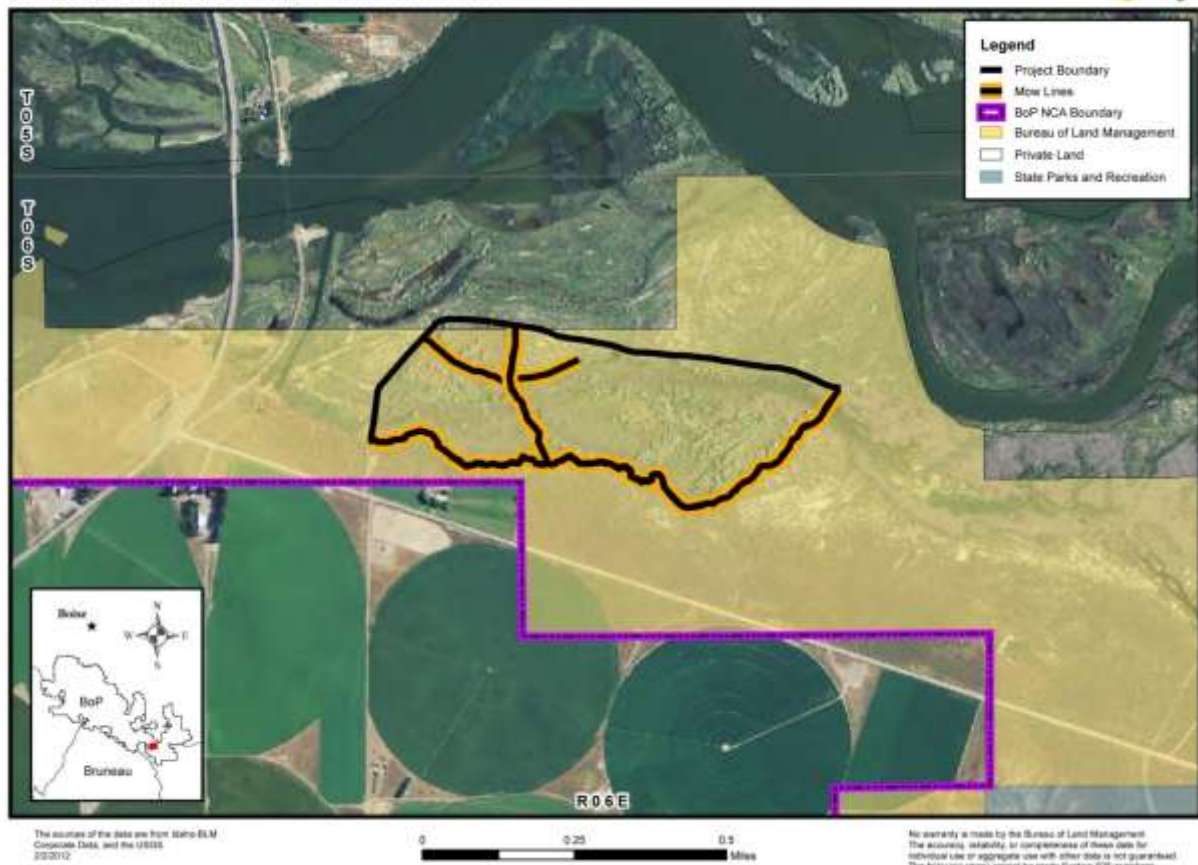
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6.0 Appendices



Map 1. BDP wetland vegetation perimeter highlighted in green. Project area for burns 1 & 2 highlighted in red.

Bruneau Duck Ponds Wetland Burn



Map 2. BDP project area showing project boundary line in black, and fuel break mow lines in black on orange.